



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/518,454	08/01/2005	Alexander Straub	CS8440/L.eA 36,202	7860
3446/ 7590 02/24/2010 BAYER CROPSCIENCE LP Patent Department 2 T. W. ALEXANDER DRIVE RESEARCH TRIANGLE PARK, NC 27709				
EXAMINER				
KOSACK, JOSEPH R				
ART UNIT		PAPER NUMBER		
1626				
NOTIFICATION DATE		DELIVERY MODE		
02/24/2010		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

blair.wilson@bayercropscience.com
pamula.ramsey@bayercropscience.com
rebecca.hayes@bayercropscience.com

Office Action Summary

Application No.

10/518,454

Applicant(s)

STRAUB, ALEXANDER

Examiner

Joseph R. Kosack

Art Unit

1626

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 December 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11 and 14-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11 and 14-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/GS-08)
Paper No(s)/Mail Date 12/11/09
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claims 11 and 14-21 are pending in the instant application.

Amendments

The amendment filed on December 11, 2009 has been acknowledged and has been entered into the instant application file.

Information Disclosure Statement

The Information Disclosure Statement filed on December 11, 2009 has been considered by the Examiner.

Previous Claim Objections

Claims 11 and 14-20 were previously objected to for containing elected and non-elected subject matter.

The Applicant has cancelled the non-elected subject matter, and the objection is withdrawn.

Previous Claim Rejections - 35 USC § 103

Claims 11 and 14-21 were previously rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe et al. (WO 01/02378 A1) in view of Patani et al. (*Chem. Rev.* 1996, 3147-3176).

The Applicant has traversed on the grounds that Betterton only discusses oxidation of alkyl sulfides by peroxymonosulfate, and that the person of ordinary skill in the art would not be motivated to use peroxymonosulfate in the instant process and appreciate the reduced yield losses from side reactions.

The Examiner disagrees. Betterton clearly teaches that at neutral and alkaline pH, that peroxymonosulfate is a faster oxidant than hydrogen peroxide. See page 531, second column. The person of ordinary skill in the art would clearly be motivated to try an oxidant in the instant process where it is already known in the prior art to be performed with hydrogen peroxide in Watanabe et al., coupled with the fact that Watanabe et al. clearly suggests the use of peroxymonosulfate. The results supplied in the previous declaration by Shlomo Cohen are not enough to overcome the extremely strong case for obviousness of claims 11 and 14-20. The rejection is maintained.

Previous Double Patenting Rejections

Claims 11 and 14-21 rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 6 of U.S. Patent No. 6,734,198 in view of Patani et al. (*Chem. Rev.* 1996, 3147-3176).

Applicant traverses the rejection on the same grounds as the 35 U.S.C. 103(a) rejection.

This is not found persuasive for the reasons stated above in the discussion of the 35 U.S.C. 103(a) rejection. The rejection is maintained.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

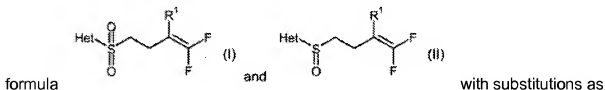
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

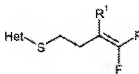
The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 11 and 14-21 rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe et al. (WO 01/02378 A1) in view of Patani et al. (*Chem. Rev.* 1996, 3147-3176).

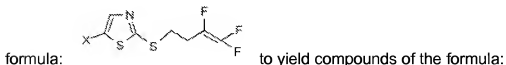
The instant application is drawn to a method of making compounds of the

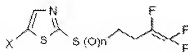


defined by oxidating a compound of the formula:  with a salt of peroxomonosulfuric acid.

Determination of the scope and content of the prior art (MPEP §2141.01)

Watanabe et al. teach the oxidation by hydrogen peroxide of a compound of the





where n is 1 or 2 and m is 3 to 10. See page 1, line 13

through page 2, line 16.

Ascertainment of the difference between the prior art and the claims (MPEP §2141.02)

Watanabe et al. do not teach explicitly the oxidation by hydrogenperoxomonosulfate, i.e. potassium peroxymonosulfate and compounds where R¹ of the instant compounds is hydrogen.

Finding of prima facie obviousness--rational and motivation (MPEP §2142-2413)

Watanabe et al. teaches that potassium peroxomonosulfate can be used as the oxidizing agent. See page 4, lines 7-11. Patani et al. teach the bioisosteric replacement of hydrogen for fluorine. See pages 3149-3150.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to follow the synthetic scheme of Watanabe et al. and substitute fluorine for hydrogen in the alkene group according to Patani et al. and use potassiumperoxomonosulfate as suggested by Watanabe et al. to make the claimed invention with a reasonable expectation of success. The motivation to do so is provided by Watanabe et al. Watanabe et al. teach the use of the synthesized compounds as nematicides. See the abstract.

Thus, the claimed invention as a whole was *prima facie* obviousness over the combined teachings of the prior art.

Double Patenting

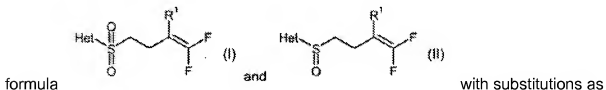
The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

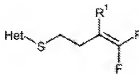
A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

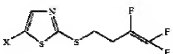
Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

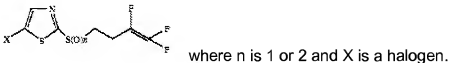
Claims 11 and 14-21 rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 6 of U.S. Patent No. 6,734,198 in view of Patani et al. (*Chem. Rev.* 1996, 3147-3176).

The instant application is drawn to a method of making compounds of the



defined by oxidating a compound of the formula:  with a salt of peroxomonosulfuric acid.

'198 teaches the oxidation of  to yield



'198 does not teach the process where R¹ of the instant compounds would be hydrogen.

Patani et al. teach the bioisosteric replacement of hydrogen for fluorine. See pages 3149-3150.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to follow the synthetic scheme of '198 and substitute fluorine for hydrogen in the alkene group according to Patani et al. to make the claimed invention with a reasonable expectation of success. The motivation to do so is provided by '198. '198 teach the use of the synthesized compounds as nematocides. See the abstract.

Conclusion

Claims 11 and 14-21 are rejected.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph R. Kosack whose telephone number is (571)272-5575. The examiner can normally be reached on M-Th 6:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph McKane can be reached on (571)-272-0699. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Joseph R Kosack/

Application/Control Number: 10/518,454

Page 9

Art Unit: 1626

Examiner, Art Unit 1626